

Remarks and Arguments

Claims 1-60 have been presented for examination. Claims 1, 8, 21, 28, 41 and 48 have been amended.

Claims 1, 2, 5-10, 18-22, 25-30, 38-42, 45-50 and 58-60 have been rejected under 35 U.S.C. §103(a) as obvious over U.S. Patent Publication No. 2002/0178380 (Wolf, previously cited) in view of U.S. Patent No. 6,604,136 (Chang, previously cited.). This rejection has been discussed previously in the response filed on December 12, 2005. Although the examiner agrees that the Wolf reference does not disclose calling specific methods in a resource API in order to configure that resource, the examiner contends that Wolf discloses a system that receives a generic network policy from an administrator, identifies various configuration changes required by specific network devices to implement that policy and applies the necessary configuration changes to the network devices. The examiner also contends that the Wolf system was designed to support multiple vendors, devices and versions.

As discussed previously, Wolf does not use API calls to configure resources. Instead, as set forth in detail in the response to the previous office communication, Wolf constructs configuration files and downloads, or pushes, these files to the resources in order to perform the configuration. Therefore, in the Wolf system, resources can only be configured if they use configuration files. Existing resources that do not use configuration files cannot be configured. The examiner contends that Wolf is silent as to how specific devices are actually configured. Applicants respectfully disagree. Wolf describes the type of devices with which it is designed to work as "network devices", including routers, switches, firewalls servers and hubs, the type of devices that are usually configured with configuration files. Wolf specifically discloses that these devices are configured with configuration files at paragraph 0011.

Although Wolf contains statements that it is designed to work with multiple vendors, devices and versions, only devices that use configuration files are disclosed. Thus, the ability to work with multiple vendors, devices and versions translates to different configuration files for different vendors, devices and versions. The paragraphs cited by the examiner do not teach otherwise. For example, paragraph 0033, to which the examiner refers, indicates that traditional manual-configuration devices require the

participation of many different ISP personnel. However, the devices to which this paragraph refers are the “network devices” that are configured by configuration files as disclosed in the preceding paragraph 0011. Paragraph 0113 discloses that the configuration files are generated by combining “configlets” and paragraphs 0142 and 0143 describe how configurations are generated for devices from the overall configuration policy. Applicants have found no other sections of Wolf that suggest that the Wolf system might be used with devices that are not configured via configuration files and the term “application programming interface” or API is not mentioned in Wolf. Configuring devices by a mechanism other than configuration files would negate a substantial amount of the disclosure of Wolf which discloses how configuration policies are converted into “configlets” which are, in turn, converted into configuration files.

The examiner further contends that the use of API methods to configure resources was well-known at the time that the present application was filed. The examiner asserts that the Chang reference discloses a mechanism (a device control module) which can be inserted between network devices, such as network processors, and their controlling hosts so that the hosts can control the processors via APIs that are exported by the device control modules. However, it should be noted that the Chang network processors are controlled by commands and that the device control module aggregates these commands into higher level commands that are part of the API (see, for example, Chang, column 7, line 64 – column 8, line 17. Therefore, the device control module of Chang cannot be directly used in conjunction with Wolf because the Chang device control module converts API commands to device commands whereas the Wolf network devices are configured with configuration files and not with commands. The Chang system is not compatible with the Wolf system nor does it suggest using API commands in the Wolf system.

Further, the examiner cites the disclosure in Chang that the use of API method calls allows resources to be managed more efficiently as motivation for combining Chang and Wolf in a manner that would suggest a substantial modification of Wolf. However, the Chang disclosure clearly indicates that the use of API method calls allow resources that use commands to be managed more efficiently. There is no indication that the claimed efficiency would also be applicable to resources that use configuration

files. The prior art must contain a motivation to make the claimed invention. See MPEP §2144. Thus, applicants still believe that the combination of references suggested by the examiner is improper and that the present claims patentably distinguish over the cited combination of references.

The claims have been amended in order to clearly and distinctly point out that the invention applies to devices that are configured by API methods. Claim 1 is illustrative. It now recites: "A method for managing multiple resources in a storage area network system, comprising: receiving a user request to generate a configuration policy; in response to the user request, locating the multiple resources, including storage devices, switches, host adaptors, volume managers, backup programs and copy programs, in the system, wherein each resource has an API including methods for configuring that resource ..." The other independent claims have been amended in a similar manner.

Claims 3, 4, 11-17, 23, 24, 31-37, 43, 44 and 51-57 have been rejected under 35 U.S.C. §103(a) as obvious over Wolf and Chang and further in view of U.S. Patent No. 6,671,776 (DeKoning, previously cited.) This rejection was discussed in detail in the responses to the previous office communication. As discussed above, the addition of the teachings of Chang to those of Wolf do not materially change the teachings of Wolf, because DeKoning teaches reconfiguration by modifying LUN numbers, but does not teach an additional mechanism that would be necessary to actually perform a physical configuration. Thus, the disclosure in DeKoning does not supplement the Wolf and Chang disclosures, which are related to physical configuration, to supply the inventive elements that are coordinated by a configuration policy to interact with the resources by calling the resource API set, which elements are missing in Wolf and Chang, as discussed above. The examiner contends that there is no reason why the Wolf system cannot be expanded to include any device. Applicants respectfully disagree. The reason is that Wolf's entire teaching, including generating configlets from a configuration policy and then assembling configuration files from the configlets and then downloading the configuration files, would have to be modified. Of course, this could be done, but the fact that the references can be combined or modified is not sufficient to establish *prima facie* obviousness. See MPEP §2143.01

Since claims 3, 4, 11-17, 23, 24, 31-37, 43, 44 and 51-57 are dependent on one of the independent claims 1, 8, 21, 28, 41 and 48 and incorporate the limitations thereof, they distinguish over the combination of Wolf, Chang and DeKoning in the same manner as the independent claims distinguish over the Wolf and Chang references. Further differences between these claims and the Wolf and DeKoning references are discussed in detail in the previous response to which the examiner is respectfully directed.

In light of the forgoing amendments and remarks, this application is now believed in condition for allowance and a notice of allowance is earnestly solicited. If the examiner has any further questions regarding this amendment, he is invited to call applicants' attorney at the number listed below. The examiner is hereby authorized to charge any fees or direct any payment under 37 C.F.R. §§1.17, 1.16 to Deposit Account number 02-3038.

Respectfully submitted

/paul e. kudirka/
Paul E. Kudirka, Esq. Reg. No. 26,931
KUDIRKA & JOBSE, LLP
Customer Number 45774
Tel: (617) 367-4600 Fax: (617) 367-4656

Date: 2006-06-29